

LV.—On the difference between the Robertsonian Saxifrages of Ireland and those of the Pyrenees. By CHARLES C. BABINGTON, M.A., F.L.S., F.G.S. &c.*

[With a Plate.]

HAVING recently had occasion to re-examine the Irish Saxifrages referable to Haworth's genus *Robertsonia*, I have been greatly struck by the uniform difference which exists between each of them and the corresponding plant of the Pyrenees. In a paper contained in the 'Annals of Natural History' (vol. viii. p. 321), I have already shown that the typical *Sax. umbrosa* (the Pyrenean plant) differs considerably from that found in Ireland, but was not then aware that precisely the same differences exist between the *Sax. hirsuta* and *Sax. Geum* of those two countries.

The differences to which I refer are found in the form of the margin of the leaves, which may be correctly denominated "crenate" in the Pyrenean plants, but to which the terms "acutely crenate," "serrate," or "dentate," must be applied when the Irish specimens are described. The outlines of leaves which accompany this paper will show what is intended far better than can be done by any description. They have been carefully drawn from the leaves of specimens in my own herbarium, and belong to the three above-mentioned species; Pl. IV. fig. 1—7 representing the leaves of *Sax. umbrosa*, fig. 8—10 those of *Sax. Geum*, and fig. 11—13 those of *Sax. hirsuta*. Of these, fig. 1, 8, and 11 are from Pyrenean specimens, and all the others, except fig. 2 and 3, from those found in Ireland.

Saxifraga umbrosa.

Plate IV. fig. 1. (from a specimen marked "*S. umbrosa*, Linn. In M. Bulour prope thermas Eausbonnes, Pyr. occid. 1831." Endress.) is the typical form of this species, in which the margin is truly crenate, and does not appear to be a native of Ireland; but fig. 3, which is undoubtedly the same variety, is taken from a plant possessing strong claims to be considered indigenous in the West Riding of Yorkshire, where I have seen it in profusion in Hezleden Gill, a wild and retired glen near the mountain named Pen y Gent; and the Rev. John Howson has found it in Lynn Gill, which is situated on the opposite side of the Penine chain of hills, and at a distance of about $4\frac{1}{2}$ miles from Hezleden Gill (Phytologist, p. 845). Another Pyrenean specimen, from "Cascades du Lys, montagne d'Esquierry," being No. 27 of

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Duchartre's 'Fl. Pyrenéenne,' is precisely similar to the above. This form is my *S. umbrosa a. crenata*.

Plate IV. fig. 4. (the var. *a.* of Mackay, from his cultivated Irish specimens,) is considered by my friend Mr. J. T. Mackay as the typical form of the species, and, "identical with the London Pride of the gardens" and the Pyrenean plant, has the margin crenate-serrate. A specimen, fig. 2 (" *S. umbrosa*, L. Hab. in montibus præsertim altissim. copiose.—*Peñaflor*, 11 Jul.—*Pico de Arvas*, 14 Aug." "Durieu Pl. Selectæ Hispano-Lusitanicæ. Sec. 1. Asturiæ. Anno 1835 collectæ." No. 330.), is the same variety found in the north of Spain. They are denominated by me var. *β. crenato-serrata*.

Plate IV. fig. 5. is the var. *β.* of Mackay, var. *γ. punctata*, Bab., and *Sax. punctata* of Haworth and Reichenbach. Gathered at Killarney, Ireland, in 1841.

Plate IV. fig. 6 and 7. represent Mackay's var. *γ. serratifolia*, my var. *δ. serratifolia*, and the *Sax. serratifolia* of Mackay (formerly) and Reichenbach.

Saxifraga Geum.

Plate IV. fig. 8. is the plant of the Pyrenees; it is taken from a specimen marked " *S. Geum*, L. Au Pas de Roland prope Itatou. Pyr. occid. 1831." Endress. Here the leaves are crenate, or even occasionally have the crenatures so much flattened as to become almost retuse. I believe that nothing like this has been seen wild in Ireland.

Plate IV. fig. 9. is the Irish *Sax. Geum* from Connor Hill near Dingle, county Kerry, 1841; and fig. 10 is a plant with remarkable leaves from Turk Waterfall near Killarney. Here the leaves are crenate-dentate (fig. 9), or dentate (fig. 10), thus presenting the same difference from the Pyrenean plant which was seen in *Sax. umbrosa*.

Saxifraga hirsuta.

Plate IV. fig. 11. with a crenate margin, and fig. 12 and 13 with a dentate margin, represent the corresponding forms of *Sax. hirsuta*. The first (fig. 11) is from the "Pyrenees," and was obtained from the herbarium of Dr. Leo of Metz: the others are Irish. Fig. 12 from the Gap of Dunloe, Killarney, 1841, the original Irish station. Fig. 13 from Connor Hill, county Kerry, 1841.

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